

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- Claim 1 (currently amended)
- Claim 2 (cancelled)
- Claim 3 (currently amended)
- Claim 4 (currently amended)
- Claim 5 (cancelled)
- Claim 6 (currently amended)
- Claim 7 (currently amended)
- Claim 8 (currently amended)
- Claim 9 (original)
- Claim 10 (currently amended)
- Claim 11 (currently amended)
- Claim 12 (currently amended)
- Claim 13 (new)
- Claim 14 (new)
- Claim 15 (new)
- Claim 16 (new)

1. (Currently Amended) A system for searching electronic data files stored in a data repository system, comprising:

a communications environment housing

- (i) a first agent program for a depositor computer of an electronic data file in the data repository system which first agent program is a secure extension of the depositor computer and
- (ii) a second agent program for a first user computer with access privileges to the electronic data file which second agent program is a secure extension of the first user computer;

a manifest for the electronic data file listing access controls for the electronic data file, the manifest being accessible to and maintained by the first agent program;


a first record of the first user computer's access privileges to the electronic data file, the first record being accessible to and maintained by the second agent program;

means to communicate changes to the manifest affecting the first user computer's access privileges to the electronic data file from the first agent program to the second agent program for updating the first record; and

means for the first agent program to verify the first user computer's access privileges to the electronic data file before the electronic data file is released to the second agent program.

2. (Cancelled)

3. (Currently Amended) The secure system, according to claim [[2]] 13, further comprising means for communicating the changes to the manifest affecting the first user computer's access privileges to the electronic data file from the second agent program to the first user computer.

 4. (Currently Amended) The secure system, according to claim [[2]] 3, further comprising:

a third agent program for a second user computer with access privileges to the electronic data file which third agent program is a secure extension of the second user computer; and

a second record of the second user computer's access privileges to the electronic data file, the record being accessible to and maintained by the third agent program,

and wherein the means to communicate changes to the manifest affecting the first user computer's access privileges to the electronic data file from the first agent program to the second agent program for updating the first record, comprises means to communicate changes to the manifest affecting the second user computer's access privileges to the electronic data file from the first agent program to the third agent program for updating the second record; and

wherein the means for the first agent program to verify the first user computer's access privileges to the electronic data file before the electronic data file is released to the second agent program, comprises means for the first agent

program to verify the second user computer's access privileges to the electronic data file before the electronic data file is released to the third agent program.

5. (Cancelled)

6. (Currently Amended) The secure system, according to claim [[5]] 4, further comprising means for communicating the changes to the manifest affecting the second user computer's access privileges to the electronic data file from the third agent program to the second user computer.

7. (Currently amended) The secure system, according to claim [[5]] 4, wherein the communication environment comprises a server.

8. (Currently amended) The secure system, according to claim [[5]] 4, further comprising an interface to the data repository system housed in the communications environment, the interface adapted to receive all communications to and from the data repository system and the agent programs.

9. (Original) The secure system, according to claim 8, wherein the interface is a secure extension of the data repository system.

10. (Currently Amended) A process for maintaining a secure electronic data search system for [[an]] a third party electronic data repository which contains document data files encrypted to make them secure from the administrator of the repository, the system having a manifest listing access controls for each electronic data file stored in the data repository and a record listing document access privileges for each computer with access to the electronic data stored in the repository but secure from the administrator of the repository, the process comprising the steps performed by the documents originator of:

updating a manifest for an electronic data file stored in the repository;

identifying all computers with a change in access to the electronic data file effected by the update;

communicating the change in access to all affected computes;

updating the access privileges records of all affected computers; and

communicating the updated access privilege records to the affected computers.

11. (Currently Amended) A secure system for searching electronic data files stored in a data repository system in which the documents are encrypted to make them secure from the repository administrator, comprising:


means for a data file originator maintaining a manifest listing access controls for each electronic data file stored in the data repository system;

means for restricting access to each manifest to a computer with deposit privileges for the electronic data file;

means for maintaining a record listing access privileges of users of the data file to the electronic data files associated with each computer with access privileges to at least one electronic data file in the data repository system;

means in the computer with deposit privileges for restricting access to each said record to the associated computer with access privileges; and

means for updating the record associated with each computer affected by an access change in a manifest.



12. (Currently Amended) A computer program product on a computer usable medium for maintaining a secure electronic data search system for an electronic data repository which contains data files that are encrypted to maintain them secure from the repository administrator, the system having a manifest listing access controls for each electronic data file stored in the data repository and a record listing document access privileges for each computer with access to electronic data stored in the repository, the program product performed by the data files originator comprising:

software for updating a manifest for an electronic data file stored in the repository;

software for identifying all computers with a change in access to the electronic data file effected by the update;

software for communicating the change in access to all affected computers;

software for updating the access privileges records of all affected computers;
and

software for communicating the updated access privilege records to the
affected computers.

13. (New) The system of claim 1, wherein the data repository system is a third party system where the documents are encrypted so that the administrator of the repository system does not have access to the documents in the clear.

14. (New) A computer program product on a computer usable medium for maintaining a secure electronic data search system for a third party electronic data repository in which electronic data file documents are stored in encrypted form in the data repository to prevent access by the repository administrator such a system having a record listing document access privileges for each computer with access to electronic data stored in the repository the program product comprising:

software for updating a manifest for an electronic data file document stored in the repository;

software for identifying all computers with access to the electronic data file document and for changing such access in an update software for communicating the change in access to all affected computers;


software for updating access privileges records in all affected software; and

software for communicating the access privilege records to the affected computers.

15. (New) The computer program product of claim 14, wherein the originators of the electronic data files, users of the electronic data files and the repository administrator all have vaults which are secure extensions of their respective work space.

16. (New) The computer program product of claim 15 including:

software in the vault of the document originator to encrypt a document that it receives from the originator, prior to forwarding it on to the vault of the repository;



software in the vault of the repository administrator which on receipt of the encrypted document, signs the encrypted document itself before storing the document in the electronic repository and returns to the originator's vault proof of deposition of the encrypted document;

software in the vault of a requesting user to the repository's vault to request use of the requested document;

software in repository's vault to retrieve a copy of the document in encrypted form which is forwarded, along with the requester's identity, to the originator's vault;

software in the originator's vault to verify that the requester is authorized to view the document from the access control list using an access control list identifying access ownership privileges for the document stored in the vault itself;

software in the originator's vault when the requester has access to decrypt the document and forward the decrypted document directly to the requester's vault; and

software in the requester's vault to provide proof of receipt of the decrypted document.
